

The webs should be sent to my home address, as my army address is not very permanent. My address is as follows:—

35, HIGH PARK DRIVE,
HEUTON, BRADFORD,
YORKS, ENGLAND.

Any webs which you may send will be very acceptable and will help considerably in increasing the extent of my records.

S.E.A.C.,

J. E. MARSON, F.R.E.S.

11th October 1945.

19.—NOTES ON THE GIANT WOOD SPIDER (*NEPHILA MACULATA*) IN BURMA.

(With 2 plates).

Nephila maculata is very widely distributed in Burma. My own records for 1945 give the distribution as follows: 3-2-45 Maungdaw; 23-2-45 Ramree Island; 27-5-45 Taungup; 7-9-45 mile 35 Toungoo Mawchii Road; 14-9-45 mile 53 Toungoo Mawchii Road; 1-10-45 Mawchii.

The structure and method of spinning the web is very well described in Hingston's paper 'The Snare of the Giant Wood Spider'.¹ I would however like to add the following notes on the web.

It is very common to find that the female *Nephila* uses a maze of irregular webbing at one or both sides of the large orb web. Hingston comments on this point as follows²: 'There is another structure in the architecture of the *Nephila* which I have not observed in ordinary snares. Not only does she spread an extensive sheet; but she also constructs a special barrier in order to drive her victim more surely into the toils. She places it so as to face one surface of the sheet, it is at a slightly higher level than the main snare and a little distance away. There is nothing precise or geometrical in its workmanship, it is merely a tangled maze of lines.'

This addition of an irregular maze of webbing at one or both sides of an orb web is not uncommon amongst orb-web spinners, especially in the case of immature females, and with webs in shaded places. This is quite common with species of *Gasterocantha*, especially with *G. brevispina*. In these cases it is usual for the maze webbing to be dotted with patches of white webbing about a quarter of an inch long.

The structure of which Hingston says³ 'she places it so as to face one surface of the sheet, it is at a slightly higher level than

¹ Hingston.—The Snare of Giant Wood Spider; *Journal of the Bombay Nat. Hist. Society*: Part I Volume xxxviii pages 642-649; Parts II & III Vol. xxviii pages 911-923; Part IV Volume xxix pages 70-75.

² As above.—Part III page 918, lines 18-31.

³ As above.—Part III page 918, lines 21-22.

the main snare and a little distance from it,' is typical of the web of an adult female in a position where there is a fair amount of both room and light, e.g. between trees in fairly open woodlands. I found *N. maculata* amongst the well laid-out rubber plantations in Ceylon. This was the first time that I had met the species, and I cannot remember ever seeing any additional irregular webbing in these perfect conditions for spinning the large orb web. It is therefore probable that this irregular webbing is only added by an adult female when there are shrubs surrounding the web. The upper edge of this sheet of irregular webbing is attached to the upper supports of the orb web, the lower edge being attached slightly in front of the lower supports, giving a sheet of irregular webbing at an angle to the orb web.

It is very common to find wide variations from this form even in webs of adult females. When webs are spun in semi enclosed conditions, the addition of irregular webbing at both sides of the orb web is common, giving a much more impressive structure than that of the simple orb web. From a side view the web has the appearance of a spindle. In these cases the sheets of irregular webbing are supported at their centres giving a dome of irregular webbing, as illustrated by the heavy dotted line in Fig. 1, plate 1.

The following figures from a web of this type, spun in a rather limited space, will indicate the size of this additional webbing.

H 110 cms. A_1 25 cms. A_2 45 cms. B_1 20 cms. B_2 40 cms.

The actual form this webbing is very irregular as can be seen in Plate II where the irregular webbing has been superimposed upon the orb web as seen from a front view. These illustrations were drawn from webs prepared after the whole web had been completed for three days.

The completest form of this irregular webbing is however best seen in the young stages of the female. I have never found the younger stages without an irregular web at both sides of the orb web. Often these are large as compared with the height of the orb web supports, the complete width of the spindle being equal to the height of these supports.

Abdomen Length	Orb Web Height 'H'	Measurements of Spindle				
		A_1	A_2	B_1	B_2	$A_2 + B_2$
1.1 cms.	50 cms.	10 cms.	20 cms.	7 cms.	25 cms.	45 cms.
1.1 "	50 "	12 "	28 "	9 "	25 "	53 "
1.2 "	45 "	13 "	20 "	...	8 "	21 "
1.4 "	75 "	18 "	40 "	...	15 "	33 "
1.6 "	80 "	15 "	25 "	...	10 "	25 "

PLATE I

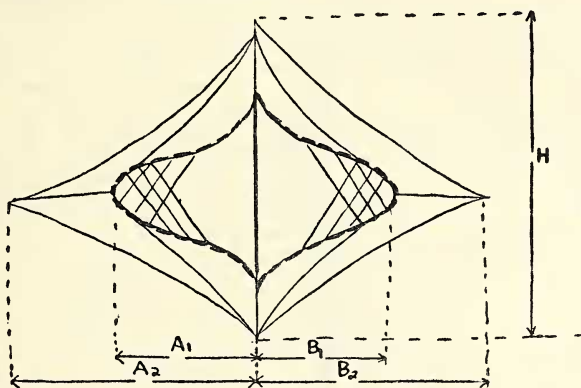


FIG 1

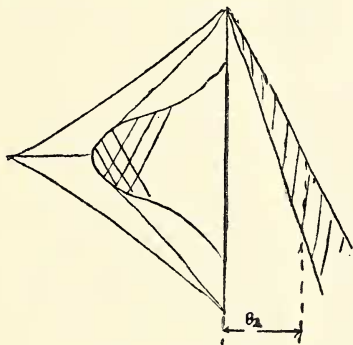
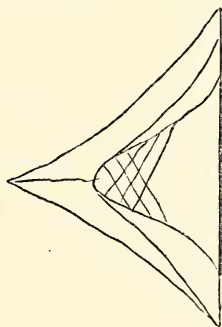


FIG 2



NEPHILA
MACULATA
WEB TYPES.

FIG 3